CONTENTS

Preface 1

A. Auslender, How to deal with the unbounded in optimization: Theory and algorithms 3

E. Balas, A modified lift-and-project procedure 19

A. Barvinok, Measure concentration in optimization 33

R.E. Burkard, Efficiently solvable special cases of hard combinatorial optimization problems 55

G. Brinkmann, A.W.M. Dress, S.W. Perrey and J. Stoye, Two applications of the Divide & Conquer principle in the molecular sciences 71

A.S. Drud, Interactions between nonlinear programming and modeling systems 99

A. Caprara, M. Fischetti, P. Toth, D. Vigo and P.L. Guida, Algorithms for railway crew management 125

M.X. Goemans, Semidefinite programming in combinatorial optimization 143

E. Boros, P.L. Hammer, T. Ibaraki and A. Kogan, Logical analysis of numerical data 163

P. Hansen and B. Jaumard, Cluster analysis and mathematical programming 191

G. Kalai, Linear programming, the simplex algorithm and simple polytopes 217

K. Fujisawa, M. Kojima and K. Nakata, Exploiting sparsity in primal–dual interior-point methods for semidefinite programming 235

M. Laurent, Cuts, matrix completions and graph rigidity 255

Yu. Nesterov, Interior-point methods: An old and new approach to nonlinear programming 285

J.-S. Pang, Error bounds in mathematical programming 299

A. Ruszczyński, Decomposition methods in stochastic programming 333

H.E. Scarf, Test sets for integer programs 355

K. Fukuda and T. Terlaky, Criss-cross methods: A fresh view on pivot algorithms 369

A.R. Conn, K. Scheinberg and Ph.L. Toint, Recent progress in unconstrained nonlinear optimization without derivatives 397

M.R. Bussieck, T. Winter and U.T. Zimmermann, Discrete optimization in public rail transport 415

J. Zowe, M. Kočvara and M.P. Bendsøe, Free material optimization via mathematical programming 445

Author Index Volume 79 467